# Author Index Canadian Journal of Animal Science, Volume 88, 2008

Aalhus, J.L., 591 Aali, M., 457 Abdul-Careem, M.F., 180 Abeysekara, A.W.A.S., 147 AbuGhazaleh, A. A., 123 Adegoke, O.A.J., 161 Afsharmanesh, M., 57 Ahvenjärvi, S., 733 Aiken, R., 181 Akhavan, T., 180 Akinremi, O.O., 162 Alashawkany, A.R., 137 Aldai, N., 152, 591 Alexander, T.W., 142 Alibin, C.P., 158 Allard, G., 325 Allison, L.E., 175 Aluko, R., 168 AlZahal, O., 736 Ambrose, D.J., 151 Ames, H., 170 Anderson, D.M., 166, 167, 178, 637 Anderson, G.H., 169, 180 Anderson, H.D., 158 Anil, L., 381 Anil, S.S., 381 Annett, C., 138 Anntunes, G., 463 Ansah, G., 180 Appuhamy, J.A.D.R.N., 730 Archbold, T., 165 Arsenault, N., 144 Ataku, K., 667 Aukema, H., 172, 182 Ayerza, R., 257

Baah, J., 140, 185
Bach, S.J., 143, 178, 185
Bailey, C.R., 113
Baines, D., 41, 51, 191, 581
Baker, K.L., 179
Bakovic, M., 152
Bal, M.A., 609
Baldwin, M.P., 176
Balendran, A., 425
Ball, R.O., 161
Bannink, A., 725, 728

Azcona, J.O., 257

Baron, V.S., 191 Basarab, J., 139, 190, 191 Bazinet, R.P., 159 Beauchemin, K.A., 97 Becker, A.B., 175 Bélaire, G., 71 Bélanger, G., 325 Beliveau, R.M., 677 Beltranena, E., 65, 293, 631 Benchaar, C., 117, 141, 145, 146, 154, 331. 335 Benkel, B.F., 135, 136 Berard, N.C., 140 Bergen, R.D., 369 Bernardes, M.S., 732 Berry, R.J., 138, 357 Berthiaume, R., 145, 335, 685 Bertolo, R.F., 176 Beta, T., 168 Bhandari, S.K., 164 Bilodeau-Goeseels, S., 136, 343 Bishop, D.G., 135 Block, H.C., 190, 667 Borderas, T.F., 1 Boylan, W.J., 391, 399, 569 Braun, K., 163 Bregendahl, K., 731 Brooks, S.P.J., 142 Brunton, J.A., 176 Bu, D., 140 Budgell, K.L., 469, 637 Burr. L., 183 Burvenich, C., 449

Campbell, C.P., 137
Caola, G., 351
Casella, S., 351
Castonguay, F.W., 85, 489
Catalá-Gregori, P., 623
Chabot, B., 139
Chae, B.J., 247, 283
Champagnem C., 156
Chan, H.M., 174, 181
Charmley, E., 152, 191, 439
Chaveiro, A., 463
Chaves, A.V., 117, 154
Cheema, S.K., 176
Chen, J., 182

Cheng, K., 136 Cheng, S.M., 139, 140 Chevalier, S., 161 Chibisa, G.E., 144 Ching, R.H.H., 171 Chiquette, J., 85, 331 Cho, F., 169 Chouinard, P.Y., 156 Christensen, D., 145, 190 Christensen, D.A., 149, 150, 184, 190, 667 Christopherson, R.J., 156 Church, J., 138 Chwalibog, A., 726 Clandinin, M.T., 152 Clark, H., 309 Classen, H.L., 577 Coates, W., 257 Colazo, M.G., 151 Collier, R.J., 449 Columbus, D., 163, 177 Colyn, J., 138, 139 Cook, N., 138, 139 Corbett, R., 151 Corey, P., 182 Cornish, S., 173 Côrtes, C., 141, 146 Cote, D., 176 Crow, G.H., 135, 142, 151 Crowe, J.R.E., 321 Cruz, G.D., 728 Cue, R.I., 213 Cunnane, S., 186

D'Amours, M., 685
Dam, Y., 175
Damanik, R., 192
Danesh Mesgaran, M., 151
Danfaer, A., 726
Daniel, M.A., 167, 178, 637
Davis, E.C., 129
de Lange, C.F.M., 163, 167, 177, 271
de Léon, V.A., 732
de Passille, A.M.B., 1
De Riu, N., 729
De Spiegeleer, B., 449
Dean, H.J., 177
DeClercq, V., 168, 183

Deen, J., 381 Delaney, S., 85 DelCurto, T., 79 DeMar, J., 186 Deng, D.F., 729 Desjardins, R.L., 641 Dhilibeck, P.D., 173 Dickson, T., 158, 162 Diehl-Jones, W., 168 Dijkstra, J., 725, 728, 736 Dinn, N., 136, 151 Dobos, R.C., 735 Dodge, M.E., 176 Doepel, L., 148, 321 Doiron, K., 189 Doncaster, K.L., 469 Dourmad, J.Y., 195 Drapeau, R., 325 Drew, M.D., 429 Du. L., 145, 190 Duchateau, G., 168 Dugan, M.E.R., 152, 185, 591 Duncan, A.M., 152, 175 Dupuis, M., 165 Durunna, O.N., 135 Duynisveld, J.L., 152, 191, 439

Edirimanne, E.R.K.V., 169 Edvardsen, H., 613 Egan, A.R., 147, 150 Eklund, M., 156 Emiola, I.A., 162 Erb, S., 581 Eskandarinasab, M., 409 Estill, C.T., 151 Eugène, M., 331 Eun, J.-S., 97

Fairbrother, J.M., 165 Fan, M.A., 144 Fan, M.Z., 152, 165, 303, 703, 731 Fang, P., 33 Fang, T., 181 Farid, A., 135, 136 Farmer, C., 160, 195, 585 Farnworth, E., 156, 173, 189 Farzamirad, V., 170, 171 Fathi Nasri, M.H., 736 Faucitano, L., 685 Felton, D.O., 123 Field, C.J., 154, 155, 156, 157 Firkins, J.L., 727 Fisher, G., 181 Fisher, M., 173 Flesch, T.K., 641 Fliss, I., 156 Foin, T.C., 732 Fournier, A., 1

France, J., 725, 728, 736 Fraser, J., 517 Fredeen, A., 144 French, N., 139 Friel, J., 171 Friel, J.K., 168, 170, 176, 177 Furedi, C.J., 149, 151 Fynn, M.A., 138

Gagnon, N., 141, 146, 165 Gallinger, C., 257 Gannon, V., 192 Gao, F., 107 Gao, Z., 641 Garcia, P.T., 257 Garland, G.J., 29 Garrioch, C.F., 153 Gaudette, N., 158 Gerdung, C.A., 155 Gervais, R., 156 Ghafouri-Kesbi, F., 409 Ghorbani, G.R., 449 Giannetto, C., 351 Gibb, D.J., 499, 659 Giguère, A., 160, 166 Gilani, G.S., 142, 188 Girard, C.L., 489 Giritharan, G., 457 Glimm, D.R., 157 Goetsch, A.L., 113 Goh, Y.K., 152 Gonyou, H.W., 9, 559 Goonewardene, L.A., 631 Gordon, M., 136, 151, 425 Gordon, N., 181 Goruk, S.D., 154, 156 Gozho, G., 144, 149, 179 Gramlich, L., 170 Grant, A., 170 Greenwood, C.E., 175 Greter, A.M., 129 Grimmet, M., 191 Guenter, W., 137

Hamedani, A., 180 Hamilton, D.L., 147 Han, Y., 187 Hanigan, M.D., 730, 734 Hao, X., 659 Harding, S.V., 161 Harmon, S.D., 186 Harris, W.S., 157 Hart, K.J., 711 Hashimoto, T., 237 Hashizume, N., 237 Hassanabadi, A., 409 Hathaway, R.L., 79 Hayirli, A., 148

He, M.L., 117, 141, 154, 155, 160 Heendeniya, R.G., 149, 150, 190 Helgason, B., 143 Heo. S., 247 Heravi Moussavi, A., 137, 151 Hernandez, C.C., 185 Hetland, H., 613 Hillyer, L., 173 Hirata, T., 237 Hobin, M.R., 149 Holley, R.A., 140 Holligan, S., 144, 303 Holly, R., 139 Holm, E., 148 Holt-Klimec, L., 138, 139 Holub, A., 153, 187 Hosea, H.J., 156 Hou, X., 107 House, J.D., 137, 158, 169, 172, 178, 182 Houweling, A.H., 168 Hristov, A.N., 117 Huang, B., 170 Huang, J.-F., 601 Hubbell, D.S., 113 Huff, M.W., 152 Huhtanen, P., 733 Humphrey, B., 535 Hung, S.S.O., 729 Huzzey, J.M., 138

Ibrahim, S.A., 123 Ipharraguerre, I., 535 Izuno, M., 237

Janzen, H.H., 143 Jassal, D., 181 Javadmanesh, A., 137 Jayas, D., 172 Jeaurond, E., 163, 257 Jew, S., 155, 168 Jin, Z., 247 John, S.J., 192 Johnson, R.P., 178 Jones, P., 155 Jones, P.J.H., 168

Kaducen, T.L., 186 Kahane, S.H., 225 Kalimbira, A.A., 181 Kalmokoff, M.L., 142 Kang, J.X., 153 Kastelic, J.P., 151 Katepa-Mupondwa, F., 172 Kebreab, E., 183, 725, 728, 736 Kelln, B.M., 146 Kelly, N., 303, 703 Kennedy, A.D., 149, 151, 225, 369, 609
Khafipoor, E., 147, 149, 179, 189
Kheadr, E.E., 156
Kiarie, E., 162, 485

Kheadr, E.E., 156 Kiarie, E., 162, 48 Kim, W-T., 283 King, R., 138 King, T., 146 Kitts, D., 168, 170

King, 1., 146 Kitts, D., 168, 170, 171 Klieve, A. V., 183 Knapp, J.R., 727 Ko, M., 144, 303 Kong, X., 170, 172 Kopilas, M.A., 158 Kozyrskyj, A.L., 175 Kramer, J.K.G., 152, 160, 185, 591

Krause, D., 139, 164, 140, 147, 164, 179, 185, 485 Krodker, A., 181 Kubow, S., 174, 181 Kuhnlein, U., 180 Kukulege, A., 137 Kulenkamp, A., 180 Kulshreshtha, S.N., 185 Kumar, A., 71

Kumar, A., 71 Kuner, J., 188 Kwan, J., 142

Laarman, A., 141 Laarveld, B., 429 Laberge, S., 85 Lackeyram, D., 165 Lang, K., 146 Lantinga, E.A. 725 Lapierre, H., 145, 335 Lardner, H.A., 19, 146 Lavoie, J.-C., 168 Lawlor, J.B., 158 Lazarevic, N., 613 Le, K., 181 Lee, H.J., 159 Lee, S.M., 729 Leeson, S., 205 Lemke, S.L., 157 Lepage, P., 138 Leson, G., 169 Lessard, M., 165, 166, 623

Leson, G., 169 Lessard, M., 165, 166, 623 Lewis, N.J., 137, 138, 357 Li, E.T.S., 171 Li, I.M.Y., 158 Li, S., 149, 189 Li, T.S.E., 158 Li, X., 641 Li, X.-Z., 189

Li, Y., 419 Li, Y.Z., 559 Liao, S., 170 Lien, V.W., 152 Lin, Y.H., 186 Ling, A., 174 Lippmeier, C., 188 Little, A.C., 139, 140

Liu, D., 141 Liu, J.-N., 174, 181 Liu, L., 731 Liu, Q., 152 Liu, T., 139 Liu, Y., 107

Lofstedt, R., 439 Lohmann, K.L., 147 Loopstra, R.C., 175 Lopetinsky, K., 293 Lopez, G., 195

Lopez, S., 736 Lotfollahian, H., 475 Louie, M., 192 Lu, J., 155, 157 Luhovyy, B., 169

Lysyk, T.J., 29

Ma, D.W.L., 153 Macdonald, C., 181 Macdonald, I., 152 Machmüller, A., 309 MacIsaac, J.L., 166, 167, 469

MacIsaac, P.F., 166 MacIssac, J.L., 637 MacKinnon, T.L., 637 Macmillan, K.L., 147, 150 MacPherson, M.J., 166 Mader, C.J., 144

Maenz, D.D., 149, 150, 190 Majak, W., 29 Mallet, S., 623

Mandell, I.B., 137, 145, 163

Marchand, S., 138 Marchessault, G.D.M., 175 Marliss, E.B., 161

Marques, A., 463 Martineau, R., 145, 335 Massé, D., 331

Masson, L., 41, 51, 191 Matte, J.J., 165, 166, 489 Mayer, F., 160

Mayer, F., 160 Mazuji, M.T., 475 McAllister, M., 142

McAllister, T., 41, 51, 117, 140, 142, 143, 152, 154, 160, 178, 179, 185, 101, 102, 369, 409, 5

**179**, **185**, **191**, **192**, 369, 499, 581, 659

McBride, B.W., 144, 303, 703, 736 McBride, R., 736

McCartney, D., 191, 517 McCartney, D.H., 19, 190 McEwen, P.L., 145, 163

McKiernan, W., 735 McKinnon, J., 141, 145, 190

McKinnon, J. J., 149, 150, 179, 184, 190, 667, 721

Mcknight, L.L., 176 McLennan, S.R., 183

McLeod, R.S., 159 McNiven, M.A., 152

McPhee, M.J., 735 Mehrotra, M., 189

Mehrzad, J., 449 Mertens, D.R., 730 Méthot, H., 489

Metz, J., 188 Miao, Z.-G., 601 Michaud, R., 85

Mickelson, J.R., 152 Miller, J.R., 159 Miller, S.P., 179

Mine, Y., 152, 165 Mir, P.S., 152, 154, 155, 160

Mirza, M.A., 469 Mitchell, A., 152 Mithani, S., 189 Moehn, S., 161 Moffat, M., 176

Moghadasian, M., 157, 181

Mohiti-Asli, M., 475 Molano, G., 309 Monardes, H.G., 213 Moniello, G., 729 Monk, J.M., 173 Montanholi, Y.R., 179

Moreira da Silva, F., 463 Moro-Méndez, J., 213 Mosenthin, R., 156

Moskal, J., 173 Mustafa, A.F., 71

Mutsvangwa, T., 144, 149, 179

Mutungi, G., 156 Myrie, S.B., 176

Nadeau, E., 165 Nagamine, I., 237 Nam, R., 153

Napadajlo, H., 155 Nassiry, M.R., 137 Naylor, J.M., 147

Neufeld, J., 158, 169 Nikkah, A., 149, 151

Niu, D., 178 Niu, Z., 507 Niven, S.J., 163 Nürnberg, K., 160

Nyachoti, C.M., 162, 164, 485

Oba, M., 129, 609 Obese, F.Y., 147, 150 Oddy, V.H., 735 Odongo, N.E., 736 Ogborn, M., 172, 182 Ohama, A., 517 Okano, M., 237 Okine, E.K., 155, 191 Olkowski, A.A., 144 Oltjen, J.W., 728, 735 Ominski, K., 139 Ominski, K.H., 140, 143, 148, 651, Opapeju, F., 164 Orengo, J., 623 Othman, R.A., 181 Ouellet, D.R., 85, 145, 335, 685

Palin, M.F., 184, 585 Palliser, C.C., 734 Palme, R., 179 Park, M.S., 247 Parrott, M.D., 175 Pawlosky, R.J., 186 Payne, R., 164 Pellerin, D., 145, 335, 685 Pelletier, S., 325 Penner, G.B., 129, 609 Perera, R., 425 Petit, H.V., 85, 141, 145, 146, 160, 184, 335 Pezeshki, A., 449 Piccione, G., 351 Pierce, G.N., 169 Pinares-Patiño, C.S., 309 Pirelli, G.J., 79 Pivotto, L.M., 137 Plaizier, J.C., 147, 149, 151, 179, 189 Plourde, M., 155 Pluske, J.R., 177, 271 Poppi, D.P., 183 Pownall, T.L., 176 Pramuk, K., 152 Praslickova, D., 180 Prayitno, N.R., 153 Pretheeban, T., 425, 457 Proctor, S.D., 154, 155, 157 Protudjer, J.L.P., 175 Pullman, A.W., 175 Pulsipher, G.D., 79 Puwerkerk, D., 183 Pye, K.M., 182

Racz, V., **145**, **190**, 667 Rademacher, M., 271 Rajamahedran, R., **136**, **151**, 425, 457 Randall Simpson, J., **181** 

Rao, J.S., 159 Rapoport, S.I., 159 Rathgeber, B.M., 469 Rathgeber, B.R., 577 Reijs, J.W., 725 Rempel, W.E., 391, 399, 569 Renema, R., 577 Reuter, T., 142 Richardson, G.F., 439 Rideout, T.C., 152, 731 Riediger, N., 157, 181 Rodriguez-Lacompte, J.C., 137 Rolland, D.C., 152, 591 Rong, Z., 601 Rosenkrans, Jr. C.F., 113 Rosenweig, B., 188 Rossnagel, B., 145, 190, 507, 711 Roura, E., 535 Rozema, E., 178 Rushen, J., 1 Ruth, M., 157 Ruth, M.R., 154

Sabourin, R., 177 Saggar, J., 182 Sainz, R.D., 728, 729, 732, 735 Salem, Jr., N., 186 Salmon, D.F., 631 Samarakone, T.S., 9 Samra, R.A., 180 Sands, J.S., 162 Santos, P., 463 Saraiva, M.M., 175 Sarson, A.J., 180 Sauvant, D., 730 Sauve, Y., 153 Schaefer, A.L., 138, 139 Schang, M.J., 257 Schenkel, F.S., 179 Schoenau, J., 146 Schwartzkopf-Genswein, K.S., 369, 499 Scott, T.A., 57 Seguin, P., 71, 325 Sethi, R., 159 Sevenhuysen, G., 182 Shah, S.M., 170 Shariatmadari, F., 475 Sharif, S., 180 Sharma, R., 185, 192 Sharma, V.D., 189 Shen, G., 33 Shen, Y., 731 Shim, Y.Y., 172 Shinde, P., 283 Shinjo, A., 237 Shirkey, T.W., 429 Shrestha, J.N.B., 391, 399, 569

Shuaibi, A., 182 Siggers, R.H., 429 Silva, E., 157 Silversides, F.G., 57, 577 Simpson, J.A.R., 175 Singh, R., 425 Siow, Y.L., 169 Slominski, B.A., 162 Small, J.A., 225 Smith, A., 309 So, M.H.H., 158, 171 Solimani, H., 151 Song, Y., 577 Soo, I., 170 Soon, G., 174 Sorensen, H., 726 Spector, A.A., 186 Spence, L.D., 177 Stanford, K., 142, 178, 185, 192 Stanimirovic, A., 153 Stark, K.D., 188 Steinhart, H., 160 Stevenson, F.C., 19 Stewart, A.A., 143, 651 St-Pierre, N.R., 733 Strathe, A.B., 726 Strawford, M.L., 559 Streeter, M., 499 Stringer, D.M., 183 Suh, M., 153, 157, 168, 170, 181 Sungawa, K., 237 Svihus, B., 613 Swanson, K.C., 144, 179, 303, 703

Tactacan, G.B., 137 Tam, K.S., 171 Taylor, C., 168 Taylor, C.G., 183 Tedó, G., 535 Thompson, L.U., 182 Tian, W.-Q., 33 Tolosa, M.X., 183 Toronchuk, G.P., 321 Trautwein, A.A., 168 Travel, A., 623 Tremblay, G.F., 85, 325 Trottier, N.L., 195 Tse, I.M.Y., 171 Tsopmo, A., 168, 170, 171, 177 Tyedmers, P., 144

Undi, M., 651, 693

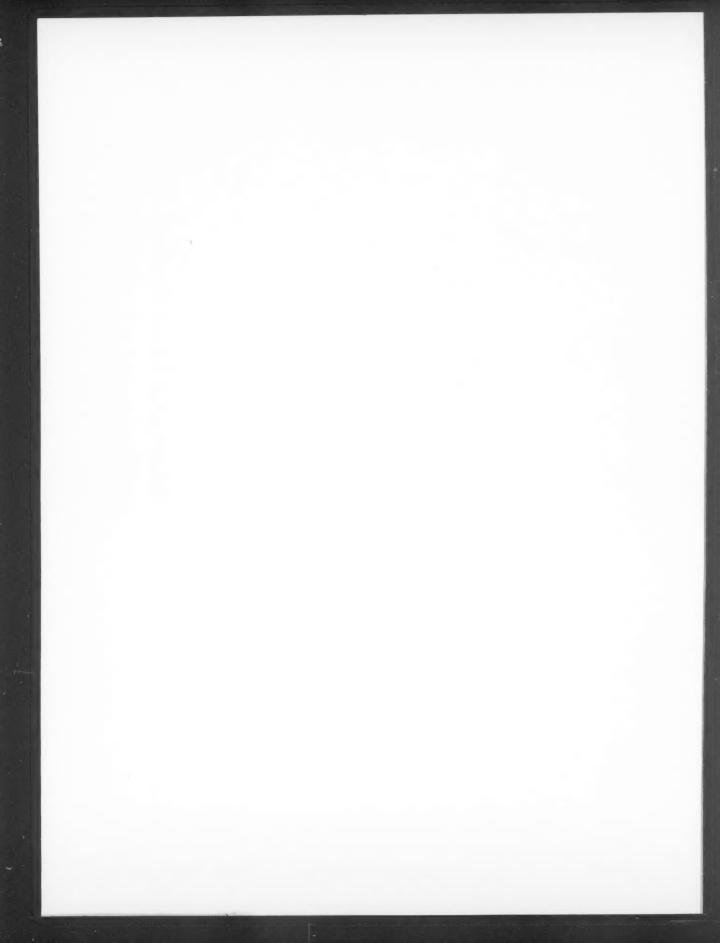
Vafa, T., 151 Van Calsteren, M.R., 156 van Haarlem, R.P., 641 Van Kessel, A.G., 139, 144, 177, 187, 429

- Van Vliet, B.N., 176 Vanstone, C.A., 168 Vatanparast, H., 170, 173 Veira, D., 151 Vine, D.F., 155, 157 Vlaming, J.B., 309 von Keyserlingk, M.A.G., 138
- Wakefield, A., 172, 182 Walburger, K.J., 79 Walker, A.M., 721 Wamnes, S., 138, 357 Wang, L.-J., 601 Wang, Y., 142, 143, 155, 160, 185 Wang, Y.J., 144, 303, 703 Wang, Y .- R., 601 Wang, Z.R., 165 Weary, D.M., 138 Weaver, C., 188 Weiler, H., 160, 182 Weiler, H.A., 172 Werchola, G., 731 Wescott, N.D., 171 Whiting, S.J., 170 Wichtel, J.J., 439 Widowski, T., 163 Wierenga, K.T., 65

Wildeman, B., 667

- Williams, L.M., 667
  Willing, B.P., 139, 177, 187
  Wilson, A.R.M., 183
  Wilson, C., 651, 693
  Wilson, C.H., 148
  Wittenberg, K.M., 140, 143, 148, 651, 693
  Wong, C., 169
  Wong, S., 174
  Woo, C.W., 169
  Woods, T.D., 167
  Woodward, B., 173
  Woyengo, T.A., 162
  Wu, G., 184
  Wunasundara, J.P.D., 172
  Wykes, L.J., 161
- Xiao, C.W., 188 Xie, J.Y., 169 Xu, W., 142 Xu, Y., 142, 178 Xu, Z., 142, 143
- Yada, R.Y., 152 Yáñez, J.L., 65 Yang, B.K., 247 Yang, C., 165 Yang, G.S., 419

- Yang, H., 177 Yang, W.Z., 117, 141, 154 Yang, X., 731 Yang, Y.X., 247 Yao, L., 168 Yen, J.T., 731 You, J.S., 154, 160 Young, K.W.H., 175 Yu, P., 141, 145, 149, 150, 184, 189, 190, 507, 711 Yuan, Y.V., 171
- Zahradka, P., 168, 183
  Zalot, L.C., 175
  Zan, L.-S., 33
  Zello, G.A., 147
  Zhang, F., 33
  Zhang, G., 170, 172
  Zhang, J.-L., 33
  Zhang, Z., 178
  Zhao, H.L., 168
  Zhu, C., 163
  Zhu, C.H., 271
  Zhu, C.L., 163, 167, 177
  Zijlstra, R.T., 293, 631, 65
  Zimonja, O., 613
  Zirkle, R., 188



## Subject Index Canadian Journal of Animal Science, Volume 88, 2008

ABCG5/G8, 152, 168 Aboriginal, 177 Acetylcholinesterase, 174, 181 Acidosis, 147 Activity, 175 activity rhythms in Capra hircus, sedentary activities, 175 Acute phase response, 179 Adaptation, 728 Adipocyte, 154, 159, 168 insulin-induced lipogenesis, 419 Adiponectin, 159, 183 Adipose tissue, 155 youthful and mature beef adipose tissue composition, 591 Aggression group size, aggression and pig productivity, 9 Agricultural production, 185 Albumin, 172 Aleutian mink disease virus, 136 N-alkanes forage intake of grazing animals, Allergens, food, 172 Alpha-linolenic acid . 186 chia to enrich ω-3 content of broiler meat, 257 Alzheimer's disease, 175 methane and ammonia emissions from a beef feedlot, 641 dietary corn silage inclusion and

dietary intake and pancreatic enzyme activity, 303 Anaemia, 181 Angiotensinogen, 168 Animal isolates, 192 Animal studies, 155 Anoestrus, 147, 150 Anthropometrics, 175 Antibiotic, 167, 152, 164 yeast beta-glucan and broiler chicken growth, 469 Antibiotic growth promoter

pancreatic enzyme activity, 703

alternatives to antibiotic growth promoters for broilers, 623 Antibiotic resistance, 139 Anti-diarrhea agents anti-diarrhea agents for piglet, 485 Antimicrobial, 140 Antimicrobial growth promotants, Antioxidant, 171, 174, 168 a-tocopherol on bovine cumulus-oocyte complexes, 463 Apoptosis, 171 Appetite, 180 Arachidonic acid. 152, 156 Arcott breed sheep genetic resources in North America, 391, 399, 569 Arginine, 176 Astaxanthin pigmentation of egg yolks, 637 Astrocytes, 186 Astronaut, 173 ATPase, 144 ATP synthase, 144 Automatic milking systems cow lameness and automatic milking systems, 1 Average relatedness genetic variability in Zandi sheep,

Bacillus thuringiensis endotoxin Bt transgenes and protein in corn silage and grain, 85 Backgrounding backgrounding calves on annual ryegrass pasture, 19 Bacteriophage, 178, 185 Bale grazing, 146 Barley, 190, 191 chemical characteristics and ruminal parameters of barley, 711 processed barley for feedlot cattle, Barley grain, 143 Barley silage, 140 Bataknese, 192 Bean, 169

Beef, 152, 155 antibiotic combinations in corn based feedlot diets, 499 wheat distillers in feedlot diets, 659 youthful and mature beef adipose tissue composition, 591 Beef cattle, 179, 185, 728, 732, 735 dietary corn silage inclusion and pancreatic enzyme activity, 703 dietary intake and pancreatic enzyme activity, 303 effects of feeding time on steers in winter, 369 effect of selenium fertilizer on selenium concentrations, 79 monensin on beef cow reproduction, 113 timed AI in beef cattle, 439 wheat-based dried distillers' grain for cattle, 721 Beef fat. 191 Behaviour, 138 behaviour of piglets following transport, 357 cow lameness and automatic milking systems, 1 electronic sow feeding system, 559 group size, aggression and pig productivity, 9 Beta-glucan yeast beta-glucan and broiler chicken growth, 469 Beverage intake, 170 Bicarbonate, 147 Bioamine, 147 Biohydrogenation, 145 in situ biohydrogenation of fatty acids, 335 Biomechanics, 182 Bitter melon, 171 Bloat, frothy effect of feeding hay on bloat, 29 Blood flow lactating sow's mammary glands, 195

Blood pressure, 168
Blood urea nitrogen, 148

Blue mussel shells, 167

Page numbers in bold refer to abstracts

Body condition, 147, 150 body condition scores in Canadian dairy cattle, 213 short dry periods for Holstein cows, Body temperature, 179 body temperature monitoring with RFID boluses, 225 Body weight, 734 Bone mass, 182 Bone resorption, 160 Bovine α-tocopherol on bovine cumulus-oocyte complexes, 463 regulation of meiosis in bovine oocytes, 343 Bovine respiratory disease, 139 Bowel inflammation, 165 Brassica carinata, 166 Brassica napus, 166 Breastfeeding, 176 Breast milk, 168 Breed 135, 179 Broiler chicken alternatives to antibiotic growth promoters for broilers, 623 chia to enrich ω-3 content of broiler meat, 257 energy partitioning in broiler chickens, 205 processing and wheat-based diets, 57 yeast beta-glucan and broiler chicken growth, 469 Brown seaweed, 142, 143 By-product wheat-based dried distillers' grain for cattle, 721

Calcium balance, 166 Camelina sativa, 166 cAMP regulation of meiosis in bovine oocytes, 343 Cancer, prostate, 153 Canola, 149, 190 Can-sugar, 149, 190 Carbodydrase enzymes, 162 Carbohydrate, 149 Carbon dioxide energy expenditure of grazing cattle, 651 Carbon:nitrogen ratio, 725 Carcass characteristics developmental pattern of lipid metabolism in gilts, 601 Carcass composition, 145

processed barley for feedlot cattle. 667 Cardiac, 157 Cardiac hypertrophy, 158 Cardiovascular, 157 Cardiovascular disease, 157, 159 Carotenoid pigmentation of egg volks, 637 Cattle, 136, 143, 147, 730 Cattle body temperature monitoring with RFID boluses, 225 E. coli 0157:H7 colonization in cattle, 41 effect of SF<sub>6</sub> permeation rate on methane emission estimates, 309 method for assessing Escherichia coli 0157:H7 toxin activity, 51 processed barley for feedlot cattle, 667 shiga toxin interactions with cattle intestine, 581 Cattle, dairy, 138, 147, 149, 150, 725, 734, 736 body condition scores in Canadian dairy cattle, 213 lipids and methane production in lactating dairy cows, 331 metabolizable protein supply from CDC SO-I oat, 507 triticale distillers' grain for dairy cattle, 129 short dry periods for Holstein cows, 449 Cell culture, 168 Cellularity IUGR and gastrointestinal growth, Chemical composition, 149 grain pearl millet, 71 Chia seed chia to enrich ω-3 content of broiler meat, 257 Chicken cryopreservation of Canadian chickens, 577 Chicken, broiler alternatives to antibiotic growth promoters for broilers, 623 chia to enrich ω-3 content of broiler meat, 257 energy partitioning in broiler chickens, 205 processing and wheat-based diets, yeast beta-glucan and broiler

chicken growth, 469

Children, 152, 175, 181 Chitooligosaccharide lecithin and chitooligosaccharide in finishing pigs, 283 Chlortetracycline antibiotic combinations in corn based feedlot diets, 499 Cholesterol, 152, 168 CIDR pregnancy rates and progesterone in cows, 457 timed AI in beef cattle, 439 Coleus amboinicus, 192 Colonization E. coli 0157:H7 colonization in cattle, 41 shiga toxin interactions with cattle intestine, 581 Community analysis, 139 Composite line, 135 Compost, 142 Concentrate dietary corn silage inclusion and pancreatic enzyme activity, Conjugated linoleic acid, 155, 157, 158, 159, 168, 183 forage and temporal changes in milk CLA, 123 linola oil and milk CLA content, 321 youthful and mature beef adipose tissue composition, 591 Continuous culture, 141 Control charts, 733 COQ10, 170 Corn. 163, 191 high moisture corn, 163 Corn distillers' grain triticale distillers' grain for dairy cattle, 129 Corn processing antibiotic combinations in corn based feedlot diets, 499 Corn silage feed enzymes for corn silage, 97 Cortisol, 179 Cortisol effect, 731 Cow. 728 cull cows, 137 fertility and parity in lactating dairy cows, 425 pregnancy rates and progesterone in cows, 457 wintering cows, 190 Cow lameness and automatic milking systems, 1

Cow reproduction, 191

Escherichia coli 0157:H7, 142, 162,

anti-diarrhea agents for piglet, 485

178, 185, 187, 192

Crab meal, 178
pigmentation of egg yolks, 637
Crude protein, 148, 165, 179
Cryopreservation
cryopreservation of Canadian
chickens, 577
CSF paradox, 147
Cytokine, 173
Cytotoxin
E. coli 0157:H7 colonization in
cattle, 41
method for assessing Escherichia
coli 0157:H7 toxin activity, 51

Cow, wintering, 191

Daily rhythm activity rhythms in Capra hircus, Dairy systems, 144 Deamination essential oils and ruminal bacteria activities, 117 Degradability feed enzymes for corn silage, 97 Depletion-repletion protocol, 178 Development, 155 stages of development, 325 nutritive value of timothy at two stages of development, 325 Diabetes, 157 early-onset type 2 diabetes, 177 fetal exposure to maternal type 2 diabetes, 177 Dietary quality, 174 high protein, 172 Dietary fibre, 730 Dieting, 175 Digestibility, 141 processing and wheat-based diets, starch digestion in weaned pig diets, 65 triticale in weaned pig diets, 631 true digestibility, 165 wheat distillers in feedlot diets. 659 zero-tannin faba bean in swine diets, 293 Digestive physiology, 187

Disease, chronic 176, 188

distillers' grain unsaturated fatty

wheat-based dried distillers' grain

wheat distillers in feedlot diets, 659

Distillers' grains

acids, 159

for cattle, 721

DNA-technology, 183

Docasahexaenoic acid, 152, 154, 156, 186, 188 Dog. 157 Dry forage intake factors depressing dry forage intake, 237 Dry matter intake, 144 forage intake of grazing animals, Dry period short dry periods for Holstein cows, 449 Dulse, 171 Dyslipidemia, 155, 157 Economic value, 135 Economics, 135 backgrounding calves on annual rvegrass pasture, 19 Egg. 158 pigmentation of egg yolks, 637 productive performance and egg yolk composition, 179 Egg fatty acid composition selenium and vitamin E on egg quality, 475 Eicosapentaenoic acid, 154, 157 Elaidic acid, 153 Electronic sow feeding system, 559 Electroretinogram, 153 Energy chemical characteristics and ruminal parameters of barley, 711 energy and lysine intake in primiparous sows, 247 energy expenditure of grazing cattle, 651 energy partitioning in broiler chickens, 205 intake, 158, 175 metabolism, 161 timed AI in beef cattle, 439 value, 150 zero-tannin faba bean in swine diets, 293 Enteric fermentation fermentable protein and carbohydrates for piglets, 271 Environmental condition activity rhythms in Capra hircus, Environmental goods and services, 185 Environmental impact, 144 Enzyme-linked immunosorbent

assay, 172

E. coli 0157:H7 colonization in cattle, 41 method for assessing Escherichia coli 0157:H7 toxin activity, 51 shiga toxin interactions with cattle intestine, 581 Essential oil essential oils and ruminal bacteria activities, 117 Estrus synchronization timed AI in beef cattle, 439 Ethanol wheat-based dried distillers' grain for cattle, 721 folic acid and reproduction in ewes, Ewe and grease fleece weights sheep genetic resources in North America, 399 Exogenous fibrolytic enzymes feed enzymes for corn silage, 97 Experimental bias, 730 Externality, 185 Extrusion starch digestion in weaned pig diets, 65 Faba bean starch digestion in weaned pig diets, 65 zero-tannin faba bean in swine diets, 293 oronasal sensing and feed appetence in domestic animals, 535 Fat. 152 Fat-1 mice, 153 Fatigue, 180 Fatty acid, 148, 152, 153, 154, 157, 159, 160, 184 chia to enrich α-3 content of broiler meat, 257 α-3 fatty acids, 153, 158, 186 linola oil and milk CLA content, 321 n3 fatty acids, 153 trans fatty acids, 152, 153 trans vaccenic acid, 155 youthful and mature beef adipose tissue composition, 591 Fecal endogenous protein loss, 165 Fecal microflora, 141 Fecal sampling, 178

folic acid and reproduction in ewes, developmental pattern of lipid Feed efficiency, 179 metabolism in gilts, 601 Feed intake Glomerular hypertrophy, 172 Food allergens, 172 dietary intake and pancreatic Food intake, 169, 180 Glomerulosclerosis, 157, 172 enzyme activity, 303 oronasal sensing and feed appetence Food patterns, 176 Glucose tolerance, 149 in domestic animals, 535 Glycemic response, 169, 180 Forage periparturient risk factors and sow cool season crops for beef grazing, Gnotobiotic longevity, 381 porcine proglucagon and microbial residual feed intake, 728 composition, 733 effects on expression, 429 restrictive feeding, 163 diet, 143 Feed restriction, 148 dietary corn silage inclusion and activity rhythms in Capra hircus, Feeder design, 167 pancreatic enzyme activity, 703 Feeding behaviour, 149 quality, 517 factors depressing dry forage effects of feeding time on steers in sampling, 733 intake, 237 winter, 369 temporal changes in milk CLA, Gonad cryopreservation of Canadian Feeding frequency, 167 123 chickens, 577 Feeding time, 151 Fractional protein synthesis rates, Grain, 145 effects of feeding time on steers in 731 winter, 369 Freshman 15, 175 Grain processing, 149 Grazing Feedlot wheat-based dried distillers' grain cool season crops for beef grazing. Gait scoring cow lameness and automatic for cattle, 721 energy expenditure of grazing Fermentation, 141, 146 milking systems, 1 Fermented liquid feed, 163 Garlic oil, 154 cattle, 651 Fertility Gas production forage intake of grazing animals. folic acid and reproduction in ewes, feed enzymes for corn silage, 97 489 Gastrointestinal function straw/chaff grazing, 146 Fertilization fermentable protein and swath grazing, 146 effect of selenium fertilizer on carbohydrates for piglets, 271 Greenhouse gases, 143 selenium concentrations, 79 Gastrointestinal tract Grind size Fetal exposure to maternal type 2 IUGR and gastrointestinal growth, processing and wheat-based diets, diabetes, 177 Fibre Gender, 163 Growing and finishing dietary fibre, 730 Gene expression, 165 group size, aggression and pig fermentable protein and flaxseed and mammary productivity, 9 carbohydrates for piglets, 271 development in swine, 585 wheat-based DDGS for feedlot Fibre, insoluble porcine proglucagon and microbial cattle, 677 fibre effects in pelleted wheat and effects on expression, 429 Growing pigs, 163 oat broiler diets, 613 Genetic markers, 180 Growth, 166, 167, 726 Fibre-protein, 149, 190 Genetic resources growth function, 736 Fibrolytic enzymes, 141 cryopreservation of Canadian growth models, 735 Finnsheep chickens, 577 growth potential, 161 sheep genetic resources in North Genetic trends triticale in weaned pig diets, 631 America, 391, 399 genetic variability in Zandi sheep, sheep genetic resources in North Fish, 157 409 America, 391 Fish meal, 151 Genetic variability, 136 yeast beta-glucan and broiler Fish oil Genetically modified plants chicken growth, 469 forage and temporal changes in Bt transgenes and protein in corn Growth factor milk CLA, 123 silage and grain, 85 developmental pattern of lipid Flax, 152, 157, 160 Genotype, 139 metabolism in gilts, 601 Flaxseed, 151, 184, 189 Genotyping, 135, 192 Growth performance chia to enrich ω-3 content of broiler Gestation zero-tannin faba bean in swine meat, 257 electronic sow feeding system, 559 diets, 293 flaxseed and mammary energy and lysine intake in development in swine, 585 primiparous sows, 247 Hay supplement in situ biohydrogenation of fatty flaxseed and mammary effect of feeding hay on bloat, 29 acids, 335 development in swine, 585 Health, 173 Folic acid Gilt, 160 Health claim, 188

Healthy eating index, 174
Heart disease, 159
Heat treatment
processing and wheat-based diets, 57
Heifer
fertility and parity in lactating dairy cows, 425
Hemp, 169
Hen, laying, 137, 166, 178

pigmentation of egg yolks, 637 Heritability

genetic variability in Zandi sheep, 409

Holstein, 137 genetic variation of *PRLR* gene and milk performance, 33 Homocysteine, 178

Hormone developmental pattern of lipid metabolism in gilts, 601

Hot boning, 137 Hull, 190 Human trials, 155

Hydroxycinnamic acids, 190 Hypercholesterolaemic, 153 Hyperhomocysteinemia, 169 Hypolipidemia, 188

Immune, 154, 156
Immunity, 165, 166
Inbreeding
genetic variability in Zandi she

genetic variability in Zandi sheep, 409 Indonesia, 192

Infant nutrition, 176, 177 Infectious disease, 138, 187 Inflammation, 154

Infrared thermography, 138, 139 Inoculant, 140

Insoluble cereal fiber, 180

Insulin, 149 insulin-induced lipogenesis, 419 insulin resistance, 155

Insulin-like growth factor-I, 147, 150

Intake models, 728
Intestinal alkaline phosphatase, 165
Intestinal migraphial application 187

Intestinal microbial ecology, 187
Intestinal microbial ecology, 187

E. coli 0157:H7 colonization in cattle, 41 method for assessing Escherichia coli 0157:H7 toxin activity, 51

porcine proglucagon and microbial effects on expression, 429

interactions with cattle intestine, 581

Intrauterine growth restriction IUGR and gastrointestinal growth, 107

Inverse dispersion

methane and ammonia emissions from a beef feedlot, 641 In vitro digestibility, **156** 

Ionophore

in situ biohydrogenation of fatty acids, 335

Ischemia, 159 Isoflavones, 188 Isotope tracers, 731

Juniper berry oils, 154

Kinetics assimilation, 729

Lactation, 190, 734, 736
energy and lysine intake in
primiparous sows, 247
lactating sow's mammary glands,
195
lipids and methane production in
lactating dairy cows, 331

lactating dairy cows, 331
D-lactic acid, 147
Lactobacillus plantarum, 140

Laidlomycin
antibiotic combinations in corn

based feedlot diets, 499 Lamb, postnatal

IUGR and gastrointestinal growth,

Lamb weight

sheep genetic resources in North America, 399

Lameness

cow lameness and automatic milking systems, I

Lasalocid, 145

in situ biohydrogenation of fatty acids, 335

Lean body mass, 173

Lecithin

lecithin and chitooligosaccharide in finishing pigs, 283

Leptin, 137

Leymus chinensis, 141 Life cycle assessment, 144

Light, dim

endocrine and production responses to dim-light, 609

Lignan, 141, 146

Lineage characterization, 192 Linola oil linola oil and milk CLA content,

Linolenic acid, 151, 186

Lipid metabolism developmental pattern of lipid metabolism in gilts, 601

Lipid peroxidation, 152

selenium and vitamin E on egg quality, 475

Lipid supplementation lipids and methane production in lactating dairy cows, 331

Lipogenesis insulin-induced lipogenesis, 419 Liquid feeding, **163**, **167**, **177** 

Liver, 183

Lobster meal, 178

Long-chain polyunsaturated fatty acids, 152

Longevity

periparturient risk factors and sow longevity, 381

Lysine

energy and lysine intake in primiparous sows, 247

Lysine requirement, 161 Lysozyme, 167

Maize, transgenic

Bt transgenes and protein in corn
silage and grain, 85

Malawi, 181 Male, 175

Malnutrition, 173

Mammary development flaxseed and mammary development in swine, 585

Mammary gland

lactating sow's mammary glands,

Management

short dry periods for Holstein cows, 449

Management strategy, 143

Manure, 140

Manure composition, 725

Marek's disease resistance, 180

Markers, 733 Mathematical model, 732

Mathematical model, 732 Meal pattern, 189

Mechanistic, 183

Medicago sativa L.

effect of feeding hay on bloat, 29

regulation of meiosis in bovine occytes, 343

Melatonin

endocrine and production responses to dim-light, 609 Meta-analysis, 730 lipids and methane production in lactating dairy cows, 331 Metabolic disorder nutritive value of timothy at two stages of development, 325 Metabolic rate energy partitioning in broiler chickens, 205 Methane, 148 effect of SF<sub>6</sub> permeation rate on methane emission estimates, 309 lipids and methane production in lactating dairy cows, 331 methane and ammonia emissions from a beef feedlot, 641 Methanogensis essential oils and ruminal bacteria activities, 117 Methylmercury, 174, 181 Metritis, 138 Microbial flux, 183 Microbial passage, 727 Microbial responses, 164 Microflora, 141 Micronutrient, 181 Milk cumulative milk yield, 736 forage and temporal changes in milk CLA, 123 linola oil and milk CLA content, Milk composition, 734 Milk fatty acids, 149, 156 Milk performance traits genetic variation of PRLR gene and milk performance, 33 Milk production, 138 endocrine and production responses to dim-light, 609 triticale distillers' grain for dairy cattle, 129 Milk yield and composition sheep genetic resources in North America, 569 Milking systems, automatic cow lameness and automatic milking systems, 1 Minimum inhibitory concentration, 140 Mink. 136 Mitigation, 143 Modelling, 183, 187, 190, 725, 728, stochastic model, 733

Moisture enhancement, 137

Molecular structure, 189 Molly, 730 Molybdenum, 177 Monensin, 145 antibiotic combinations in corn based feedlot diets, 499 in situ biohydrogenation of fatty acids, 335 monensin on beef cow reproduction, 113 Monoamine oxidase, 174, 181 Mortality, 142, 167 Mouse, 173 Multiple antibiotic resistance, 140 Mussel shells, 167 Mustard, yellow, 172 Mycosporine-like amino acids, 171

NADPH oxidase, 169 Napin, 172 National nutrition survey, 174 Neonate, 176 Nervous system, 186 Net energy intake, 726 Net feed efficiency, 191 Nitrogen availability, 727 Nitrogen balance, 151 Nitrogen efficiency, 725 Non-starch polysaccarides, 162 North America, 177 North American breeds sheep genetic resources in North America, 391 Nova Scotia, 144 NPCILI, 168 Nutrient, 730 Nutrient availability, 189 Nutrient digestibility, 151, 162 lecithin and chitooligosaccharide in finishing pigs, 283 Nutrient requirements, 190 Nutrient sensing oronasal sensing and feed appetence in domestic animals, 535 Nutrient supply, 150 Nutrient uptake lactating sow's mammary glands, 195

nutritive value of timothy at two stages of development, 325 zero-tannin faba bean in swine diets, 293

Oat genotype metabolizable protein supply from CDC SO-I oat, 507

Nutrition, 173

Nutritive value

development in swine, 585 Oilseed, 148, 152 full-fat oilseeds, 166 Olfaction oronasal sensing and feed appetence in domestic animals, 535 regulation of meiosis in bovine oocytes, 343 α-tocopherol on bovine cumulusoocyte complexes, 463 Optimiation, 135 Oral supplements, 175 Ovsynch pregnancy rates and progesterone in cows, 457 timed AI in beef cattle, 439

Obesity, 154

flaxseed and mammary

Offspring

Palatability, 190 Palmaria palmata, 171 Pancreas dietary corn silage inclusion and pancreatic enzyme activity, 703 dietary intake and pancreatic enzyme activity, 303 Parity fertility and parity in lactating dairy cows, 425 Particle size distribution, 190 Passage rate, 733 Pasture, 148 backgrounding calves on annual ryegrass pasture, 19 Pathogen, 139, 140 PCR-RFLP. 137 Pea protein isolate, 164 Pearl millet grain pearl millet, 71 Pelleting, steam fibre effects in pelleted wheat and oat broiler diets, 613

performance, 164, 167
improving productivity of steers fed grass silage, 685
lecithin and chitooligosaccharide in finishing pigs, 283
performance and carcass quality, 677
processed barley for feedlot cattle, 667

productive performance and egg yolk composition, 178 short dry periods for Holstein cows, 449 wheat-based DDGS for feedlot cattle, 677
Perilipin, 183
Permeation rate
effect of SF<sub>6</sub> permeation rate on methane emission estimates, 309
Peroxisome proliferator-activated

receptors, 158

Phleum pratense L.
nutritive value of timothy at two
stages of development, 325

Phlorotannin, 142, 143 Phosphorus, 146, 163, 177 Phytase, 162, 177

processing and wheat-based diets, 57

Pig. 138, 152, 161, 162, 163, 167, 176, 178, 187 behaviour of piglets following

transport, 357
fermentable protein and
carbohydrates for piglets, 271
flaxseed and mammary
development in swine, 585
group size, aggression and pig

productivity, 9 insulin-induced lipogenesis, 419 porcine proglucagon and microbial

effects on expression, 429 zero-tannin faba bean in swine diets, 293

Pig, weaned, 165, 731 behaviour of piglets following transport, 357

early weaning, 138 starch digestion in weaned pig diets, 65

triticale in weaned pig diets, 631 Piglet, 156, 162, 164, 165, 187

anti-diarrhea agents for piglet, 485 behaviour of piglets following transport, 357 Plant extract, 185

alternatives to antibiotic growth promoters for broilers, 623

Plant sterol, 168
Plasma LPS, 179
Polyamine, 147
Polychlorinated biphenyls, 174
Polymorphism, 137
Pork quality
lecithin and chitooligosaccharide
in finishing pigs, 283
Postpartum, 147, 150

Postpartum, 147, 1 Post-prandial, 153 Potassium, 146 Potato, 191 raw potato starch, 164

Poultry, 138 Preadipocyte, 171 Prebiotic

alternatives to antibiotic growth promoters for broilers, 623

Predication equation

forage intake of grazing animals, 693

Pregnancy, 151

pregnancy enhancement, 136

Pregnancy rate

fertility and parity in lactating dairy cows, 425

pregnancy rates and progesterone in cows, 457

Prepubertal, 160 Prion protein gene, 135 Probiotics, 165, 185

Processed grains

Bt transgenes and protein in corn
silage and grain, 85

Processing, 169 Production, 151 Productivity

group size, aggression and pig productivity, 9

productive performance and egg yolk composition, 179

Profit, 135 Progesterone

fertility and parity in lactating dairy cows, 425

pregnancy rates and progesterone in cows, 457

Proglucagon

porcine proglucagon and microbial effects on expression, 429

Prolactin receptor

genetic variation of *PRLR* gene and milk performance, 33

Prolificacy

folic acid and reproduction in ewes, 489

Prostate cancer, 153

Protein, 161, 164, 173, 182 chemical characteristics and ruminal parameters of barley, 711

fermentable protein and carbohydrates for piglets, 271 metabolizable protein supply from

CDC SO-I oat, 507 protein degradation balance, 507 protein digestibility-corrected

amino acid score, 169 protein metabolism, 161 Protein, metabolizable, 727 metabolizable protein supply from CDC SO-I oat, 507

Protein source, 162 Protein, undegradable

improving productivity of steers fed grass silage, 685

Proteolysis

essential oils and ruminal bacteria activities, 117

Proximate analysis, 169 PUFA synthase, 188

Pulse, 169

Pulse wave velocity, 170 Pure culture, 142 Pyridoxine, 166

Radio-frequency identification body temperature monitoring with RFID boluses, 225

Rainbow trout, 166

Rapeseed

chia to enrich α-3 content of broiler meat, 257

Rare earth elements, 141

Rat, 155

Zucker rat, 183

Red blood cell, 157

Renal health, 172 Reproduction, 136, 184

folic acid and reproduction in ewes,

monensin on beef cow reproduction, 113

sheep genetic resources in North America, 399

timed AI in beef cattle, 439

Retina, 153 Risk factor

periparturient risk factors and sow longevity, 381

Robustness, 733

Romanov

sheep genetic resources in North America, 391, 399

Rubber tree, 732

Rumen, 146, 183, 189

body temperature monitoring with RFID boluses, 225

degradability, 149 epithelium, 728 evacuation, 733

fermentation, 143, 149

function, 727 models, 730

residence time, 733 Rumen carbohydrate

improving productivity of steers fed grass silage, 685
Rumenic acid
youthful and mature beef adipose tissue composition, 591
Ruminal degradability grain pearl millet, 71
ruminally degradable protein, 179
Ruminal digestion, 730
Ruminant chemical characteristics and ruminal parameters of barley, 711
Ruminant livestock

methane and ammonia emissions from a beef feedlot, 641 Runt, 176 Ryegrass, annual cool season crops for beef grazing,

Safety, 189 Satiety, 169 Schizochytrium, 188 Scrapie, 135 Season, 138 behaviour of piglets following transport, 357 Seaweed, 143, 160 Selenium, 181, 729 effect of selenium fertilizer on selenium concentrations, 79 selenium and vitamin E on egg quality, 475 sensitivity analysis, 733 Sensory analysis, 158 Sex. 161 SF<sub>6</sub> tracer effect of SF<sub>6</sub> permeation rate on methane emission estimates, 309 Shear force, 137

Sheep, 135 genetic variability in Zandi sheep, 409

Sheep breed sheep genetic resources in North America, 391, 399, 409, 569 Shellfish

blue mussel shells, 166 shellfish by-products, 167 Shell quality, 166

Shiga toxin shiga toxin interactions with cattle intestine, 581

Signalling, 161 Silage, 145 barley silage, 140 Bt transgenes and protein in corn silage and grain, 85 feed enzymes for corn silage, 97 Silvo-pasture, 732 Single nuclear polymorphism, 168 Skeletal muscle, 161 Slaughter technique, 733 Small grain cereals cool season crops for beef grazing, 517 Software, 735

Soluble fibre fibre effects in pelleted wheat and oat broiler diets, 613 Somatosensing

oronasal sensing and feed appetence in domestic animals, 535

Sow electronic sow feeding system, 559 energy and lysine intake in primiparous sows, 247 lactating sow's mammary glands,

periparturient risk factors and sow longevity, 381

Soy protein, 188 SREBP-1c insulin-induced lipogenesis, 419 Starch

starch digestion in weaned pig diets, 65 Starch gelatinisation

fibre effects in pelleted wheat and oat broiler diets, 613 State-space modelling, 726

Statins, 153
Steam-pelleting
fibre effects in pelleted wheat
and oat broiler diets, 613
Steardonic, 157

Steer, 145
backgrounding calves on annual ryegrass pasture, 19
effect of feeding hay on bloat, 29 improving productivity of steers fed grass silage, 685

Stochastic model, 733 Storage selenium and vitamin E on egg quality, 475 Straw/chaff grazing, 147

Streptococcus faecium, 140
Sturgeon, 729
Subacute ruminal acidosis, 147, 149, 179, 189

Sulphur hexafluoride energy expenditure of grazing cattle, 651 Sunflower oil
forage and temporal changes in
milk CLA, 123
Sunflower seed
in situ biohydrogenation of fatty
acids, 335
Superoxide, 169
Supplementation
effect of selenium fertilizer on
selenium concentrations, 79
Sustainable, 732
Swab, rectoanal mucosal, 178
Swath grazing, 147
Swine, 177

Taste oronasal sensing and feed appetence in domestic animals, 535

Synchronization, 136

TDN-based model metabolizable protein supply from CDC SO-I oat, 507 Telenutrition, 170

Temperature, body 179 body temperature monitoring with RFID boluses, 225

Tenderness, 137
Thermoregulation
effects of feeding time on steers in
winter, 369

winter, 369 TIM-1, **156** 

Tissue degradation, 142 α-Tocopherol, 181 α-tocopherol on bovine cumulus-oocyte complexes, 463 Torbangun, 192

TPN, 176 Trace gas emissions methane and ammonia emissions

from a beef feedlot, 641
Tracer delivery, 731

Trans fatty acids, 152, 153
youthful and mature beef adipose
tissue composition, 591

Transgenic maize

Bt transgenes and protein in corn
silage and grain, 85

Transition period, 148

Transponder bolus body temperature monitoring with RFID boluses, 225

Transport, 138
behaviour of piglets following
transport, 357
Trans vaccenic acid, 155
Trend, 170

Triglyceride, 153, 155

triticale distillers' grain for dairy cattle, 129

triticale in weaned pig diets, 631

Tropics, 732 Trypsin

dietary corn silage inclusion and pancreatic enzyme activity, 703 dietary intake and pancreatic enzyme activity, 303

Tryptophan, 166
Turkey, 167
Tween 80, 141
Tylosin
antibiotic combinations in corn
based feedlot diets, 499

Undegradable protein improving productivity of steers fed grass silage, 685 Urea recycling, 179

Vaccenic acid youthful and mature beef adipose tissue composition, 591 Variation effect of SF<sub>6</sub> permeation rate on methane emission estimates, 309 Visceral organ mass, 144 Viscosity

fibre effects in pelleted wheat and oat broiler diets, 613

Visfatin, 158

Visual perception, 152

Vitamin

folic acid and reproduction in ewes, 489

selenium and vitamin E on egg quality, 475

vitamin B<sub>6</sub>, 178

vitamin D receptor, 180

Water intake

factors depressing dry forage intake, 237

groundwater quality, 139 Weaned pigs, 164, 731

starch digestion in weaned pig diets, 65

triticale in weaned pig diets, 631

Weaning, 156 behaviour of piglets following

transport, 357 early weaning, 138

starch digestion in weaned pig diets, 65 triticale in weaned pig diets, 631

Weight, 175

IUGR and gastrointestinal growth, 107

Wheat

triticale in weaned pig diets, 631 processing and wheat-based diets, 57

starch digestion in weaned pig diets, 65

wheat-based DDGS for feedlot cattle, 677

wheat distillers in feedlot diets, 659 Willingness-to-pay, 185

Yeast

yeast beta-glucan and broiler chicken growth, 469 Yellow mustard, 172

Yolk pigmentation pigmentation of egg yolks, 637

Zucker rat, 183